North American Digital Systems Directory (NADSD)

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Abstract

Have you ever wanted to know if there might be a Packet BBS in a distant city where a friend lives? Or what the frequency is of the PacketCluster station in your area? Many times it isn't easy to find out about digital services in a distant area. In the past, one way to get this information was to consult the packet listings in the American Radio Relay League (ARRL) Repeater Directory. That's now a thing of the past. The North American Digital Systems Directory (NADSD) project was begun in January of 1997 to make information concerning amateur radio digital systems available to amateur radio operators. This paper will describe the history, purpose, and functions of the NADSD.

History / Purpose

During the last few months of 1996, while planning the 1997-98 edition of the ARRL Repeater Directory, the ARRL concluded that the Repeater Directory was no longer the most effective medium for information regarding amateur radio digital systems. This was a mild shock to many in the digital community, but instead of seeing doom and gloom, several regional digital groups approached TAPR shortly after the announcement and asked if something could be done to salvage the situation. Discussions involving various regional digital groups that provide data to the digital section of the ARRL Repeater Directory and the staff at ARRL HQ led to the conclusion that TAPR was the logical group to take on the task. TAPR President Greg Jones, WD5IVD, and a team of volunteers representing a number of regional groups quickly defined and developed an all-electronic World-Wide-Web based replacement, known as the North American Digital Systems Directory (NADSD) <http://www.tapr.org/directory>.

With the support of the American Radio Relay League (ARRL), TAPR began creating and organizing the NADSD project. Within 3 weeks of the ARRL announcement about the removal of the digital section from the Repeater Directory, the TAPR development team had been formed and three weeks later the first version of the NADSD was operational with several minor additions taking place over the next few months.

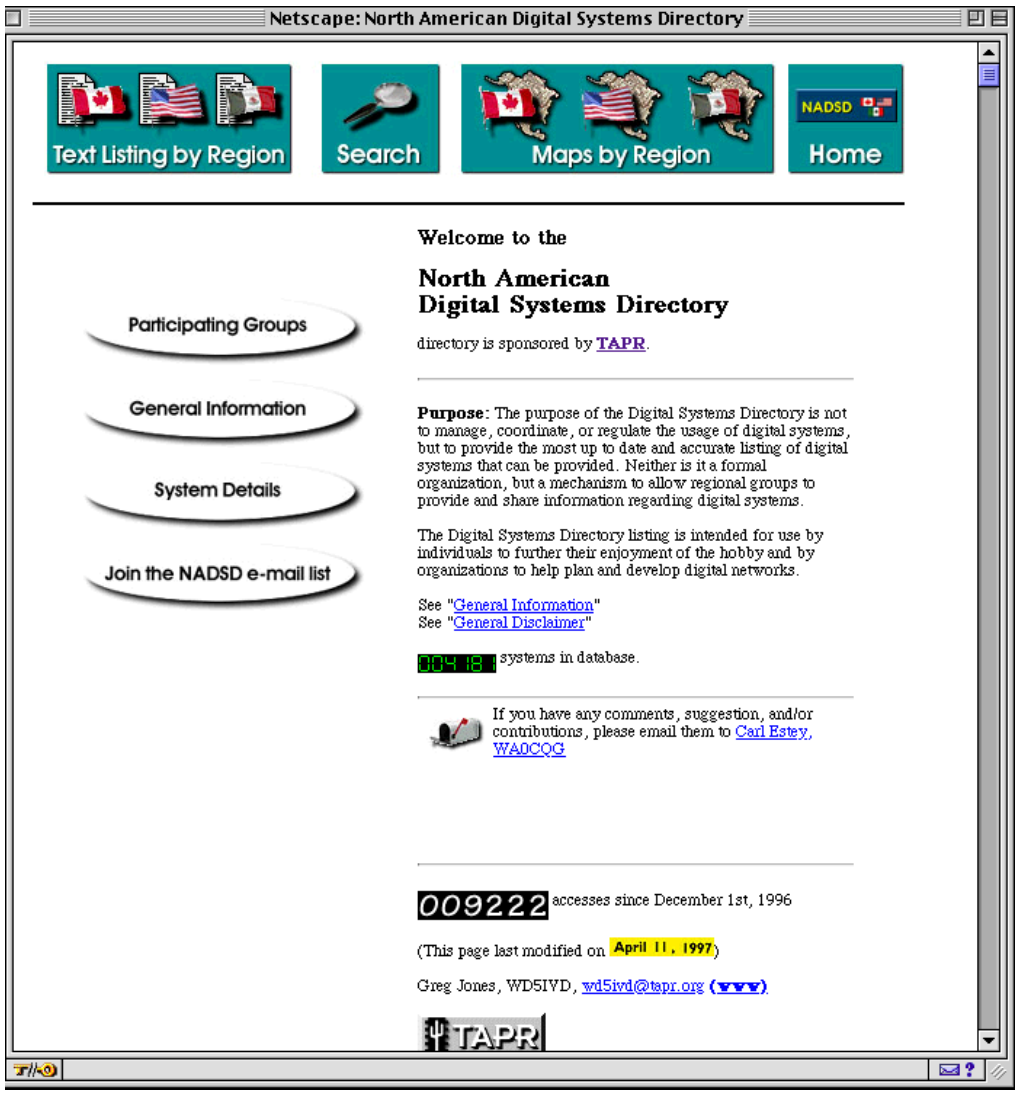

Figure 1 - NADSD Home Page

The NADSD describes systems used by amateur radio stations involved in digital communications in United States, Canada, and Mexico. The Digital System Directory is based on information provided by regional, state, and local organizations as well as individuals in a nearly realtime format. This allows information to be maintained and updated more frequently than in a yearly publication. TAPR has made and will continue to make the NADSD database available on TAPR's yearly CD-ROM and is looking into doing some type of printed document in the future for those without technology access at home.

The purpose of the Digital System Directory is not to manage, coordinate, or regulate the usage of digital systems, but to provide the most up-to-date and accurate listing of digital systems that can be provided. Neither is it a formal organization, but a mechanism to allow regional groups to provide and share information regarding digital systems. The Digital System Directory is simply intended for use by individuals to further their enjoyment of the hobby and by organizations to help plan and develop digital networks.

Participation / Activity

The NADSD began with a short list of regional groups, but soon grew to represent over ninety information submitters (regional groups, local groups, and individuals). Figure 2 shows the growth of the system and compares it to the Digital Listing of the 1996-97 ARRL Repeater Directory. As of August 1997, eight months into the project, the NADSD is over 56% larger then the last Repeater Directory Digital Listing. 4175 systems are present in the NADSD as of the middle of August, covering forty-two states of the US and eight Canadian Provinces. Figure 3 gives a current breakdown of activity by state / province. Several states are still in the 'area to develop' category. If you are in one of these areas, you might check on who was providing this information in the past and have them contact the NADSD.

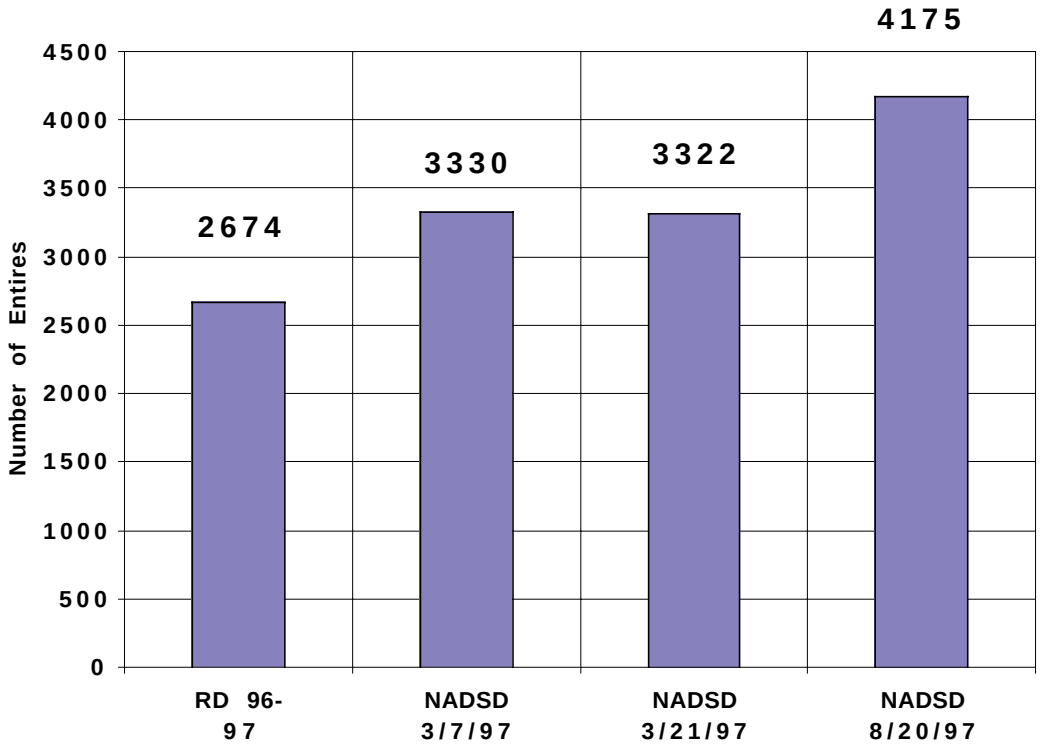

Figure 2 — NADSD Growth

New groups or individuals wishing to submit data to the directory need to fill out an application that will be sent to the overview committee for consideration. To keep the directory data gathering process as simple as possible, we ask for people to check the list of Participating Organizations first to see if someone is not already covering their area. Working with one of these existing groups is preferable to having two groups each submitting data on the same systems. However, like anything in amateur radio, the system has several groups that overlap and the system has no problem handling this issue. If you feel that your group can contribute new accurate data on systems not being covered at the present time, then we welcome your application.

If you have a suggested change or error correction to a record in the directory, please contact the person submitting the data for that record entry. The name should be found at the end of the record data row and can be clicked on to create an e-mail message.

Participating Organizations, after their applications are accepted, are given explicit instructions by private e-mail on how and where to upload their data files. They are given a password to allow secure access to their files in the database directory. This way, each data submitter / group has their own private upload area, to which no one else has access, to view the raw upload data.

Participating Organizations should upload new data records into the system whenever the system information has changed. The automatic directory update program runs at regular intervals and if it detects an updated file, it generates a new web page based on that revised information.

	Rpt Dir 96-97	NADSD 3/7/97	NADSD 3/21/97	NADSD 8/20/97	Varience from last period	Varience from 96-97 Rpt Dir
TOTAL # OF LISTINGS	**2674**	**3330**	**3322**	**4175**	**853**	**1501**

Indicates area to develop

Present Growth compared to RD **56.1%**

STATE/PROV.	Rpt Dir 96-97	NADSD 3/7/97	NADSD 3/21/97	NADSD 8/20/97	Varience from last period	Varience from 96-97 Rpt Dir
Alaska	47	42	42	40	-2	-7
Alabama		29	31	29	-2	29
Arizona		83	43	44	1	44
Arkansas	106	31	31	31	0	-75
California	138	225	225	234	9	96
Colorado	129	2	2	7	5	-122
Connecticut	7	50	48	54	6	47
Delaware	9	21	21	21	0	12
Florida	129	169	169	173	4	44
Georgia		1	4	3	-1	3
Hawaii	9				0	-9
Idaho	14			1	1	-13
Illinois	211	236	238	237	-1	26
Indiana		230	234	234	0	234
Iowa	5	2	2	52	50	47
Kansas	94	14	15	13	-2	-81
Kentucky					0	0

Figure 3 — NADSD Activity by State/Region

Louisiana	57	25	25	25	0	-32
Maine	25	29	29	35	6	10
Maryland	60	140	140	140	0	80
Massachusetts	13	82	85	98	13	85
Michigan	155			148	148	-7
Minnesota	20	52	52	52	0	32
Mississippi		1	1	4	3	4
Missouri		4	7	7	0	7
Montana	57				0	-57
Nebraska	21			13	13	-8
Nevada	67	21	24	43	19	-24
New Hampshire	33	39	39	46	7	13
New Jersey	28				0	-28
New Mexico	28	36	36	36	0	8
New York	95	21	21	26	5	-69
North Carolina	137	207	203	203	0	66
North Dakota	37				0	-37
Ohio	66	63	63	68	5	2
Oklahoma		73	82	69	-13	69
Oregon	110	118	119	125	6	15
Pennsylvania	197	121	126	154	28	-43
Rhode Island	24	29	29	30	1	6
South Carolina		58	57	55	-2	55
South Dakota					0	0
Tennessee					0	0
Texas		539	538	550	12	550
Utah	117	1	1	1	0	-116
Vermont	10	16	18	18	0	8
Virginia	17	57	57	224	167	207
Washington	71			249	249	178
West Virginia	58	123	123	121	-2	63
Wisconsin	85	193	193	193	0	108
Wyoming	23				0	-23
# of listings	**2509**	**3183**	**3173**	**3906**	**733**	**1397**
# of States	**38**	**38**	**38**	**42**	**4**	**4**

Figure 3 — NADSD Activity by State/Region (cont.)

STATE/PROV.	Rpt Dir 96-97	NADSD 3/7/97	NADSD 3/21/97	NADSD 8/20/97	Varience from last period	Varience from 96-97 Rpt Dir
Alberta	43					-43
British Columbia	13			41	41	28
Manitoba	11					-11
Maritime	7	7	7		-7	-7
New Brunswick				12	12	12
Newfoundland						
Northwest Territory	1					-1
Nova Scotia				40	40	40
Ontario		22	25	23	-2	23
Prince Edward Island				8	8	8
Quebec	44	93	93	93		49
Saskatchewan	4	12	12	37	25	33
Yukon	4	13	12	15	3	11
# of listings	**127**	**147**	**149**	**269**	**120**	**142**
# of Prov/Terr.	**8**	**5**	**5**	**8**	**3**	**0**

STATE/PROV.	Rpt Dir 96-97	NADSD 3/7/97	NADSD 3/21/97	NADSD 8/20/97	Varience from last period	Varience from 96-97 Rpt Dir
Puerto Rico	6	0	0	0	0	-6
U.S. Virgin Islands	3	0	0	0	0	-3
Br. Virgin Islands	1	0	0	0	0	-1
Costa Rica	4	0	0	0	0	-4
Cuba	3	0	0	0	0	-3
Mexico	10	0	0	0	0	-10
Peru	11	0	0	0	0	-11
# of listings	**38**	**0**	**0**	**0**	**0**	**-38**
# of Countries/Terr.	**7**	**0**	**0**	**0**	**0**	**-7**

Figure 3 — NADSD Activity by State/Region (cont.)

The System

The NADSD is designed to automatically run and maintain itself with little or no intervention by the project team. Participating groups simply upload their updated information and every several hours the system checks all data to see if anything has changed. If changed data is present, the system generates all new pages to reflect the changes made by the submitting group(s). In this way, the NADSD is a very decentralized structure and allows groups to update and maintain their information as it is convenient for them to do. Some groups have updated their information weekly, others monthly, and a few others just the initial time. It is up to the participants to choose the frequency in which they update their information. In this way, the project team has no other worry than to make sure the system is running correctly, or if a group uploads poorly formatted data to work with them, to get the format corrected. Helping groups understand the format, formatting, and ftp uploading has been one of the largest chores during the project. Now that the initial groups have been brought up to speed on this process, the load has lightened, with only new groups being worked with.

As contrasted with the manner in which the ARRL Repeater Directory was done, the NADSD automated system allows the project team to now focus more on long-range issues of quality, area of coverage, and future information distribution, instead of having to process the data by hand each year.

The NADSD provides data in two formats based from the data submitted: Text output and Maps. The Text output is presented in both HTML and as a text file that can be downloaded and posted off to packet radio or other means if necessary. The mapping, which uses Steve Dimse's, K4HG javAPRS software, allows for areas to be looked at in a graphical fashion. The ability to look at the data in both text and mapped format is a huge step forward from previous methods of information distribution. The text and maps are available for selection off the home page using the menu bar on top. On the left, the text sections are situated by area and on the right, the mapping sections can be selected.

The Text Listing

When a user first enters the text section, they receive a map to the area that can then allow a selection of a specific region or section. Figure 4 shows the Canada selection page. The user would then choose a province within Canada to see that text listing. The text listing provides Output and Input Frequencies, Call and alias, System Information including speed, type, software, IP, etc, with location and information on the sponsoring organization and who submitted it. A link is provided at the end of each entry, so corrections can be sent directly to the submitter of the information.

Figure 4 - Text Selection for Canada

Ontario: North American Digital System Directory

Ontario Map (javAPRS) | View print version |
Search Listing | Canada Listing | US Listing | Mexico Listing | Canada Maps | US Maps | Mexico Maps

OUTPUT INPUT	CALL ALIAS	SPEED SYSTEM TYPE NETWORK TYPE SOFTWARE USED IP ADDRESS FQDN	COUNTY LOCATION GEOGRAPHIC AREA	SPONSOR & ORGANIZATION NOTES	SUBMITTER LAST UPDATED
Coldwater					
440.025	VE3FJB-5 MEDONTE	1200 Switch BPQ FN04eq	Simcoe Medonte Simcoe	VE3FJB HEX-9 Emerg. Pwr.	A. Mitchell 18-08-97
430.55	VE3FJB-5 MEDONTE	19200 Switch BPQ FN04eq	Simcoe Medonte Simcoe	VE3FJB HEX-9 Emerg. Pwr.	A. Mitchell 02-07-1997
Dwight					
145.01	VE3MUS-1 MSKOKA	1200 Switch NetROM	Muskoka Dwight Muskoka	VE3KR MFMC	A. Mitchell 02-08-1997
440.025	VE3MUS-11 #LKBYS	1200 Switch NetROM	Muskoka Dwight Muskoka	VE3KR MFMC	A. Mitchell 02-08-1997
Keswick					
445.95	VE3YRA-3 NWMRKT	1200 Switch BPQ	York Keswick York	VE3CGR YRARC	A. Mitchell 18-08-97
445.95	VE3YRA-3 NWMRKT	9600 Switch BPQ	York Keswick York	VE3CGR YRARC	A. Mitchell 18-08-97
North Bay					
145.01	VE3NBC NORBAY	1200 Node NetROM	Nippissing North Bay Nippissing	VA3PC n/p	A. Mitchell 02-08-1997
Owen Sound					
436.3	VE3XOX-10 #XOXHS	19200 Switch BPQ	Grey Owen Sound Grey	VE3XOX n/p	A. Mitchell 02-07-1997
430.55	VE3XOX-9 OS445	1200 Switch TheNET	Grey Owen Sound Grey	VE3XOX n/p	A. Mitchell 03-16-1997
Parry Sound					
440.025	VE3PSP-3	1200 Switch BPQ	Parry Sound Parry Sound Parry Sound	VE3LWC n/p	A. Mitchell 18-08-1997
Tory Hill					
145.01	VE3TBF TORHIL	1200 Switch NetROM	Haliburton Tory Hill Haliburton	 n/p	A. Mitchell 02-08-1997

Figure 5 - Ontario Text Listing

The javAPRS Mapping

One of the newest features of the system is the inclusion of dynamic maps. The user can select the mapping icons to see various selections for each country. Figure 6 shows the selection page for the US. Once a section has been selected, the user will receive a javAPRS screen. Figure 7 shows the one for Texas. The user has complete control over what is displayed and the zoom.

Figure 6 - Map Selection for US

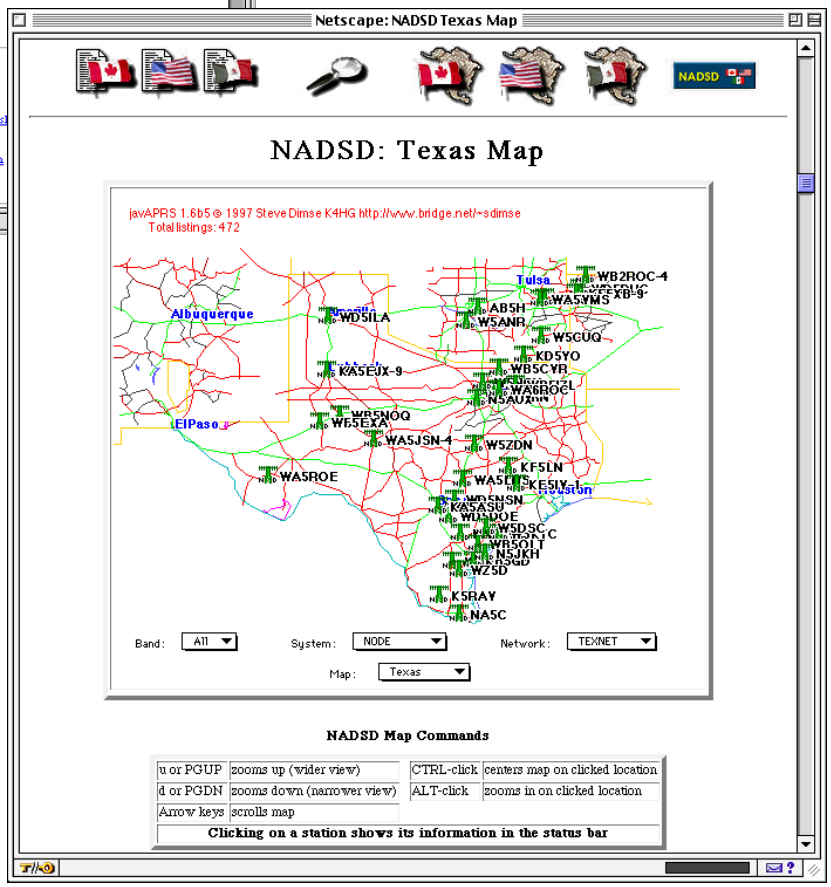

Figure 7 - Map of Texas and surrounding states

Figure 8 shows a zoom in on the Dallas/Ft Worth area showing only TexNet nodes. The ability to control and see visually where nodes are located in relation to one another is a tremendous tool of the system. In the next version, we are looking at ways for the data submitters to show links between systems, in order to show networking interconnects.

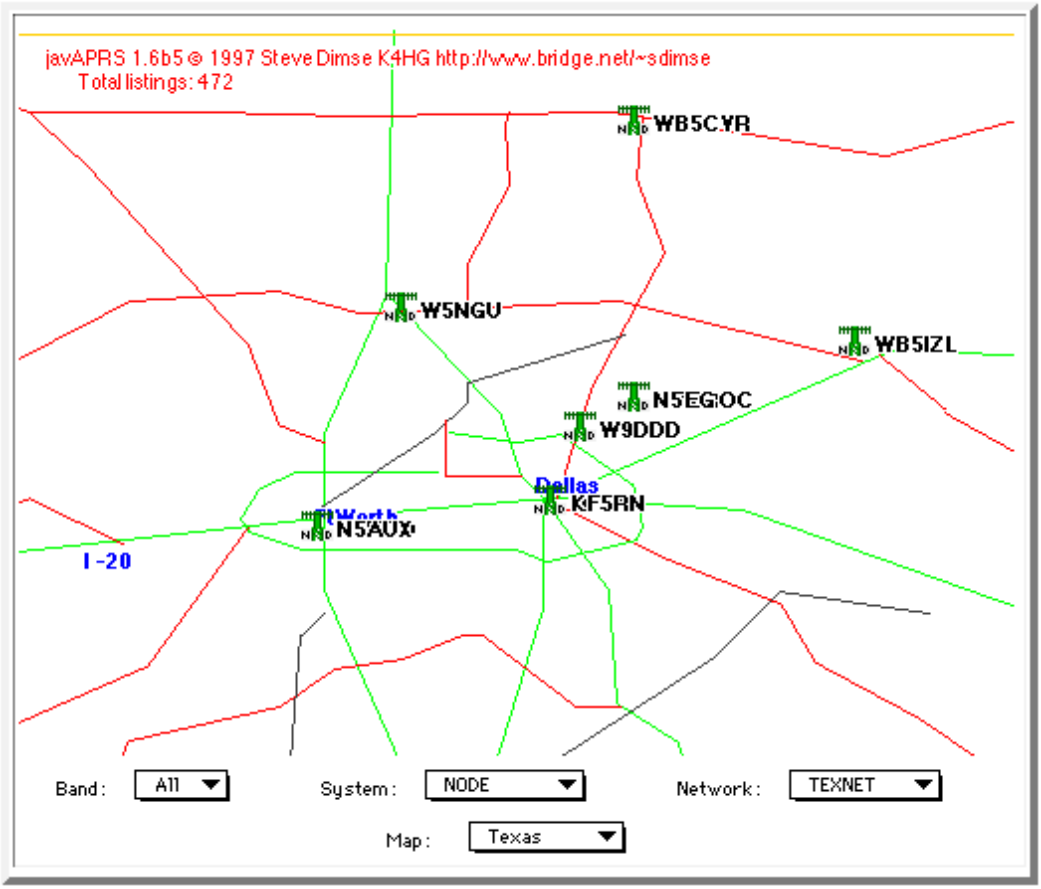

Figure 8 -Zoom in on Dallas/Ft Worth

Data Entry Method

The 1997 format of the Directory is an expanded format based upon the older format used by the ARRL Repeater Directory. The reason for this was twofold 1) data submitted by the ARRL was easier to incorporate into the system and 2) participating groups were able to expand their own ARRL databases during the first year.

The data file submitted is an ASCII Tab Delimited file format. The only fields that are mandatory for year one are STATE (field D) and CITY (field U). Submitters have been supplying most of the fields which has helped the quality of the data greatly. Figure 9 shows the database file definitions.

Figure 9 - NADSD Data Format

Field	Field Name	Permitted Entriesor & Examples	Explanation
A	**BAND**	3.5 | 7 | 10 | 14 | 18 | 21 | 24 | 29 | 52 | 144 | 219 | 222 | 440 | 1200 | ...	Enter the nominal band frequency as one of the indicated values. Enter it exactly as shown. If your system does not match any of these "preset" entries, contact the committee for guidance.
B	**OUTPUT**	145.01	Enter the primary output Frequency of the system expressed in MHz. For channelized operation (VHF/UHF), enter the nominal channel frequency such as the examples shown. For HF operation , enter the exact "mark" frequency for the mode of operation being used.
C	**INPUT**	446.025	For any system in which the input frequency is different from the output frequency (field B), enter the input frequency here. For VHF/UHF channelized operation, enter the nominal channel frequency such as the example shown. This field would apply to all types of repeaters (with or without attached nodes), as well as "split frequency" simplex and full duplex nodes. Please enter the details of the system in the NOTES field (field K).
D	**STATE**	**USA:** CT | CA | TX | ... **CANADA:** AB | BC | MB | NB | NF | NS | NT | ON | PE | QC | SK | YT **MEXICO:** TBD	Enter the Two Letter State Designator as defined by the US Postal Service, the 2 letter Canadian Province Designator as defined by Canada Post or the Mexican state designator shown. Please note that for the Canadian province of Quebec is listed as QC, but the system will also accept PQ as an alternate. Please note that for the Canadian province of Yukon Terr. is listed as YT, but the system will also accept YK as an alternate. The STATE field is necessary for the proper operation of the automatic WEB generating program and the 2 letter code must be entered exactly as shown. Otherwise the record will be ignored.
E	**LOCATION**	Upper Podunk	Enter the name of the nearest town or city to the exact location of the system. Where the system is wide spread such as APRS, enter an appropriate name for the whole area that the system covers such as "Statewide". Data should be in word capital format (i.e. Location).
F	**CALL**	WA1XYZ-5 WD6ABC	Enter the callsign and SSID of the System. Where the SSID is 0, it should be omitted.
G	**SPONSOR**	WIARC/VE2CWI	Enter the name or initials of the Sponsoring group, club or individual and the callsign normally used by that club or person. If both an individual and a group sponsor the system, then enter the individual's name here and enter the group's name in field Y (ORGANIZATION).
H	**LAST UPDATE**	02-21-1997	Enter the date when the information of the entry was last updated. As the entries information is updated or corrected, this date should reflect the date the submitter changed the information in their database. It is to be expressed in the numerical format MM-DD-YYYY .
I	**SOURCE**	UNY REPCO TPRS	Enter the name or initials of the group that the person submitting the data represents. Also known as the "Participating Organization".
J	**GEOG AREA**	NW VTSo CAE ON	Enter the geographic location (within the state) or the county area within which the system operates. County may be abbreviated as "cty". Data should be in word capital format (i.e. Geog Area).

K	**NOTES**	On Mt. xxx, Btty Power, Bit regen rptr, etc	Enter any explanatory notes that would indicate unusual features of the system and that would help the user better understand how to use the system. Please keep it short. Abbreviate if necessary. If the system is a backbone link, indicate here that the system is not for User access. If the system is a "network server" (not having a local user port), then indicate here the nearest network user port and connect path to that network server.
L	**ALIAS**	ARA8, SRTOGAGABLES, #2NUUE, etc	Enter the Node Alias assigned to the system.
M	**SPEED**	1200 | 2400 | 4800 | 9600 | 19200 | ...	Enter the data rate of the system in bits per second (bps). The value should be entered exactly as the numbers shown. If the system operates at a data rate different from these "preset" numbers, contact the committee for guidance.
N	**SYSTEM TYPE**	SWITCH | DIGI | BBS | NODE | DX CLUSTER | APRS | DIGITAL RPT | LINK |	Enter the closest term that defines the system type. If the system does not fall exactly into one of these terms, enter the closest term and explain any differences in the notes (field K). For example: an audio repeater for packet use would be a Digital Repeater with the Audio type noted in the notes. Be careful to enter the term exactly as shown, as the SYSTEM TYPE string is used to define the map icon used in the automatic NADSD mapping system. If your system does not match any of these "preset" entries, contact the committee for guidance.
O	**NETWORK TYPE**	ROSE | NETROM | THENET | BPQ |TCP/IP | TEXNET | APPLETALK | GATEWAY | X1J | PC/TNC | FLEXNET | KANODE |	Enter the name of the networking protocol used for L3/L4 network systems. Be careful to enter the term exactly as shown, as the NETWORK TYPE string is used to define the map icon used in the automatic NADSD mapping system. If your system does not match any of these "preset" entries, contact the committee for guidance.
P	**SOFTWARE USED**	FBB | RLI | MSYS | AA4RE | AK1A | JNOS | ...	Enter the name of the software used for the network or server system. Please enter the terms specified exactly as shown since they are used by the automatic programs.
Q	**IP Address**	129.120.111.78	Enter the full numeric Internet address of the system (if applicable). It is entered in the format ###.###.###.### with each numerical group separated by decimal points. This field would normally only be used by systems used as TCP/IP routers or servers.
R	**FQDN**	wb1dsw.ampr.org	Enter the "Fully Qualified Domain Name" of the system. Like the IP address, this field would only be used by systems used as TCP/IP routers or servers. The format is normally a number of lower case text strings separated by decimal points. Be very careful to observe the correct case (upper or lower case) when entering the FQDN
S	**LAT**	4515.48	Enter the Latitude of the system in the format <degrees minutes>.<hundredths of minutes> (DDMM.HH). North latitude is assumed. If your available data is in degrees/minutes/seconds, then the seconds can be converted to hundredths of minutes by multiplying by 1.66 . If your available data is in the "Maidenhead Locator" format (eg FN34be) then there are programs available to convert it to degrees/minutes.hundredths. One example of such a program is available on most F6FBB BBS systems. Note that the Latitude field entry is essential for the system to be entered into the NADSD mapping system. If you do not wish to give the exact location of the system, then round the latitude value off to the nearest minute (1 mile) or 10 minutes (10 miles).

T	**LON**	7529.12	Enter the Longitude of the system in the format <degrees minutes>.<hundredths of minutes> (DDDMM.HH). West longitude is assumed. If your available data is in degrees/minutes/seconds, then the seconds can be converted to hundredths of minutes by multiplying by 1.66 . If your available data is in the "Maidenhead Locator" format (eg FN34be) then there are programs available to convert it to degrees/minutes.hundredths. One example of such a program is available on most F6FBB BBS systems. Note that the Longitude field entry is essential for the system data to be used by the NADSD mapping system. If you do not wish to give the exact location of the system, then round the longitude value off to the nearest minute (0.5-1 mile) or 10 minutes (5-10 miles)
U	**CITY**	Syracuse San Diego Lower Podunk	Enter the name of the nearest major town or city which the system serves. The directory is indexed by this field within each state and this field is mandatory. The data may be the same as LOCATION (field E). Data should be in word capital format (i.e. City Name). The CITY field is necessary for the proper operation of the automatic WEB generating program. If this field is blank, the record will be ignored.
V	**COUNTY**	OTSEGO ORANGE etc	Enter the name of the state County that the system is physically located in. The word county is not needed. Data should be in word capital format (i.e. County Name).
W	**STATE**	CA | TX | PQ | etc ...	Enter the US or Mexican state or the Canadian Province that the system is located in. The format is the official 2 letter postal designation. This entry is the same as field D defined above and that field can simply be copied over to this field.
X	**COUNTRY**	USA, Canada, or Mexico,	Enter the name of the country in which the system is located. This field determines the database group into which the data record will be entered.
Y	**ORGANIZATION**	LPARC Lower Podunk ARC	In cases where there is more than one sponsor for the system, enter the second name here. The primary sponsoring group or the individual sponsor is entered in field G.
Z	**SUBMITTER INFO**	Joe Ham, N9XYZ	Enter the name and callsign of the person submitting the data to the database. This name is displayed at the end of the record file so that those people who have changes or comments can forward the necessary information to the person who has the password priviledge for modifying the files in question.
AA	**SUBMITTER E-MAIL**	jham@insane.net	Enter the Internet e-mail address of the person submitting the data files to the directory database. This address is used to automatically direct any changes/comments to the person responsible for the data.
AB	**SOURCE E-MAIL**	organize@insane.net	Enter the Internet e-mail address for the "Participating Organization" who the person submitting data to the database represents. The name of this organization is entered in field I.

The Microsoft's Excel spreadsheet program is a very good way to create the required "TAB delimited text" file. Submitters can either enter raw information directly into the spreadsheet cells or import data from another database program such as dBase IV. The spreadsheet format allows easy filing of whole columns with the same value (such as the "Country" field) and of moving whole columns around. Full featured word processors can be very useful to filter text files for unwanted characters, etc. When dealing with long lines of text without carriage returns, most word processors will automatically word wrap the text. This makes it very difficult to distinguish between separate records. If possible, turn off the word wrap feature or have the processor insert a visible symbol for the carriage return. Some simple text editors do save TABs intact when you save an edited file. Others do not, but rather convert TABs to spaces. Norton Editor, MS WRITE, and MS NOTEPAD have been tested and found to export the TABs intact. MS EDIT and UED (a simple DOS shareware text editor) do NOT save TABs but rather convert them to spaces. There are many utility programs that can be used to view the real contents of ASCII files. Hex editors such as PCTools hex editor or Norton Disk Editor will work well if you have them. LIST is a simple DOS shareware program that is very good. It will view ASCII files and display them with or without visible control character symbols or as a hex editor.

How the System Works

The functions of the system are fairly straightforward and are comprised of two phases. Phase 1 allows the submitter to upload and then have the data checked and Phase 2 rebuilds the web pages and maps.

Phase 1 - Submitter Upload / CHECKPROGRAM

Each submitter is assigned an FTP area to uploaded their information files into. Each hour the CHECKPROGRAM runs on the TAPR.ORG system and checks for any changes in the files. If a file has changed, the CHECKPROGRAM then examines the new input and e-mails a report back to the submitter regarding the status of the latest upload. This checking routine has been very handy in allowing quick feedback to the submitter and getting changes reuploaded to correct information, problems, or errors in the data provided. In addition, the CHECKPROGRAM uses the GIS database of locations to help submitters that have left blank the LAT/LON fields and suggest possible location information. This has helped to get initial data within a geographic area and made available to the mapping part of the NADSD until much more accurate LAT/LON information can be collected. The GIS database looks something like this for Austin, Texas: Austin, ppl, TX, Travis, 48, 453, 3016.01N, 09744.34W, BGN 1931, 501, Austin East, 514013.

Phase 2 - GENPAGES

Phase two is the creation of the text information web pages, plain text output, and data that javAPRS uses. This is accomplished using a PERL script developed by the author and takes about 15 minutes to run with the over 4000 entries in the system. GENPAGES reads in each data file in the system and then generates all the necessary HTML code, text output, and data for javAPRS to use. The GENPAGES program run every 4 hours which allows the NADSD to be updated six time daily as new and updated information is made available to the system.

The Future / Conclusion

The NADSD is approaching the conclusion of year one and will begin to work towards making sure all groups double check their information for the upcoming CD-ROM distribution. Some of the issues we had to face during the first year was related to education regarding how to get each user up to speed on making their information available in TAB delimited ASCII output uploaded to TAPR.ORG via ftp sessions. For some this was not an issue, but for many more there was a step learning curve involved with some amount of frustration at the new environment that the system was being maintained in. After 6 months of operations, most of these problems have subsided and the task ahead is to focus on better data and more coverage.

There has been concern voiced by some that the 'packet radio' data is not being made available via packet radio. Many of the concerns focus on the thought that the Internet is taking away from packet radio. This was one reason the text version of the output was generated, but the problem now is that many of the files are just to large to be placed on the packet radio networks and packet radio BBSs. We hope having the information published once a year in the TAPR CD-ROM and also the possibility of some limited amount of printed materials will help offset the lack of distribution over the packet radio networks and packet radio BBSs for the actual systems that are being cataloged. If anything, the NADSD is a good example of how the Internet is helping to provide a service that would never have been possible over the current Packet Radio network. Use of the NADSD as a tool to find out about sites in your area, or for an upcoming site in a quick and effective manner, should mean more usage of packet radio systems that are active.

The future is bright for the NADSD, but like any volunteer project, the group is always looking for others that would want to help out. We need to find a few individuals that want to take up the chore of beating the bushes to get more data submitters in areas that we are lacking, as well as help in writing articles about the NADSD to help spread the word about the system.

For further information on the project and how to get involved, regional groups should check http://www.tapr.org/directory or send e-mail to Carl Estey, wa0cqg@tapr.org

References

1. TAPR's North American Digital Systems Directory. (1997a). Information [1 web pages]. Available Web: http://www.tapr.org/directory/info.html

2. TAPR's North American Digital Systems Directory. (1997a). How it Works [1 web pages]. Available Web: http://www.tapr.org/directory/how.html

3. TAPR's North American Digital Systems Directory. (1997c). NADSD Home Page Available Web: http://www.tapr.org/directory/

4. TAPR, 8987-309 E. Tanque Verde Rd #337, Tucson, AZ, 85749. Office: 940-383-0000. Fax: 940-566-2544. E-mail: tapr@tapr.org. Web: http://www.tapr.org